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ELIMINATION FROM THE PUBLIC SECONDARY SCHOOLS OF THE UNITED STATES

A "STUDY OF 11,224 PUBLIC HIGH SCHOOLS," BASED UPON THE
REPORTS OF THE UNITED STATES COMMISSIONER OF
EDUCATION FOR THE YEARS 1912, 1913, 1914, AND 1915

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One of the most serious problems in secondary education today is that growing out of the enormous elimination of pupils from our secondary schools. Especially is this a serious matter now, for at this time the high schools of this country must reach in increasingly large numbers the citizenship of tomorrow. This democracy tomorrow will be in more urgent need of safe and sane judgments from all of its constituency than ever before.

It is a severe criticism of our administration of secondary education when, the country over, about thirty-six out of every one hundred who enter the ninth year of our secondary schools remain to graduate. We may well pause to consider this fact alone, but, according to studies made by Dr. George D. Strayer, of Teachers College, Columbia University, and other prominent educators, only about 35 per cent of those who enter the first grade of the elementary school reach the first year of the high school! In other words, from twelve to fourteen out of every one hundred entering the first grade of the elementary school graduate from the high school. Stating the facts somewhat differently, we find that 92 per cent of all persons enrolled in the public-school system between the ages of six and twenty-one are in the elementary schools, 6 per cent in the high schools, and 2 per cent in colleges and universities.

It is time that we pause to give full consideration to the tremendous fact that for every thirty-six whom we honor on Commence-

ment night (and they deserve it!) we have left by the wayside within four short school years of thirty-six weeks each nearly twice that number. The accompanying tables might well be distributed in every faculty and every committee meeting in which the problems of secondary education are being discussed.

It is not the purpose of this study to propose remedies for these conditions. The tables will have served their purpose if they direct our attention more specifically to the problem of waste in secondary education and suggest, possibly, that we should look more to the conservation of boys and girls and less to the fetish of universal university preparation and "holding-up-the-standards."

METHODS OF DETERMINING THE ELIMINATION

1. The total number of pupils entering in September, 1911, the 11,224 high schools included in this study was taken as the basis upon which to compute the elimination. These same pupils were followed through the *Reports* of the United States Commissioner until 1915, when normally they were due to graduate—that is, in the 1911-12 *Report* these were first-year pupils; in the 1912-13 *Report* they were second-year pupils, etc.

2. The number of schools reporting in 1911 was 11,224, and, although the number of schools reporting varied in each of the succeeding years, the number was reduced to the base 11,224. The variation in the number of schools reporting was from 11,224 in 1911 to 11,617 in 1915.

SOURCES OF ERROR

1. *Retardation due to failures and other reasons.*—There was no way to distinguish between retarded pupils and those actually eliminated. However, what happens in practically all cases of serious retardation is quite obvious.

2. *Methods of classifying pupils by years.*—There is no uniform basis upon which this is done among schools.

3. *Failure of some schools to report continuously for the four years.*—The same schools may not have made up the total number reporting from year to year.

4. *Effect of rapid development.*—In some sections of the country the extremely rapid development of high schools caused a better showing to be made than normal conditions would warrant.

PREPARATION OF THE TABLES

The accompanying tables were prepared on the basis of one hundred pupils in the first year. The figures given for the second, third, and fourth years indicate respectively the number out of the original one hundred who remained in school up to that time.

TABLE I
SHOWING ELIMINATION BY STATES IN THE NORTH ATLANTIC DIVISION

	First Year	Second Year	Third Year	Fourth Year
Maine.....	100	72	58	50
New Hampshire.....	100	72	57	51
Vermont.....	100	71	49	47
Massachusetts.....	100	67	51	46
Rhode Island.....	100	62	42	36
Connecticut.....	100	68	49	45
New York.....	100	62	37	30
New Jersey.....	100	57	45	39
Pennsylvania.....	100	63	48	33
Division.....	100	66	47	39

TABLE II
SHOWING ELIMINATION BY STATES IN THE NORTH CENTRAL DIVISION

	First Year	Second Year	Third Year	Fourth Year
Ohio.....	100	68	55	44
Indiana.....	100	73	61	54
Illinois.....	100	63	44	42
Michigan.....	100	70	56	46
Wisconsin.....	100	73	57	51
Minnesota.....	100	67	50	46
Iowa.....	100	76	59	47
Missouri.....	100	65	43	33
North Dakota.....	100	59	42	33
South Dakota.....	100	70	50	40
Nebraska.....	100	68	49	36
Kansas.....	100	68	48	42
Division.....	100	69	51	43

In each of the several tables (I-V) the figures for the division are based on the total number of pupils in the division who, accord-

TABLE III

SHOWING ELIMINATION BY STATES IN THE SOUTH ATLANTIC DIVISION

	First Year	Second Year	Third Year	Fourth Year
Delaware.....	100	59	38	28
Maryland.....	100	65	50	35
Virginia.....	100	60	40	22
West Virginia.....	100	63	42	34
North Carolina.....	100	62	26	17
South Carolina.....	100	73	56	17
Georgia.....	100	56	35	15
Florida.....	100	67	39	28
Division.....	100	65	44	28

TABLE IV

SHOWING ELIMINATION BY STATES IN SOUTH CENTRAL DIVISION

	First Year	Second Year	Third Year	Fourth Year
Kentucky.....	100	58	38	19
Tennessee.....	100	55	38	21
Alabama.....	100	74	49	33
Mississippi.....	100	75	50	25
Louisiana.....	100	76	50	34
Texas.....	100	68	46	27
Arkansas.....	100	60	38	27
Oklahoma.....	100	58	44	21
Division.....	100	64	43	28

TABLE V

SHOWING ELIMINATION BY STATES IN WESTERN DIVISION

	First Year	Second Year	Third Year	Fourth Year
Montana.....	100	70	42	31
Wyoming.....	100	60	39	35
Colorado.....	100	68	48	38
New Mexico.....	100	59	37	33
Arizona.....	100	62	52	47
Utah.....	100	64	47	37
Nevada.....	100	60	48	31
Idaho.....	100	66	50	37
Washington.....	100	65	46	39
Oregon.....	100	67	50	43
California.....	100	60	44	40
Division.....	100	62	45	37

ing to the Commissioner's *Report*, were in the first year in 1911, in the second year in 1912, in the third year in 1913, and in the fourth year in 1914. These figures probably vary from the averages or the

medians of the respective tables since, in computing the elimination by states, slight variations in the number of schools reporting were neglected, i.e., Nebraska may have reported 510 schools in 1911 and 513 schools in 1912. The figures for the divisions are even more accurate than the averages or medians under these circumstances.

In Tables III and IV, in some instances, we drew upon a study of elimination based upon state reports made by Dr. William F. Russell, dean of the School of Education, University of Iowa.

TABLE VI
SHOWING ELIMINATION BY DIVISIONS

	First Year	Second Year	Third Year	Fourth Year
North Atlantic.....	100	66	47	39
North Central.....	100	69	51	43
South Atlantic.....	100	65	44	28
South Central.....	100	64	43	28
Western.....	100	62	45	37
United States.....	100	66	48	38

Table VI is a summary. It might be well to note here that in the United States thirty-four pupils out of every one hundred never reach the second year of high school; fifty-two do not reach the third year, and sixty-two do not remain until the fourth year!

TABLE VIa
SHOWING THE NUMBER OF PUPILS ENROLLED IN 11,224 PUBLIC HIGH SCHOOLS OF THE UNITED STATES, BY YEARS. CLASS ENTERING IN 1911

	First Year	Second Year	Third Year	Fourth Year
Pupils enrolled.....	461,228	304,150	221,325	178,624
Base 100.....	100	66	48	38

Probably the best index of the elimination is found in the percentage of graduates. Because of the fact that the schools reporting were not the same in both instances and because in some schools pupils classified as third-year pupils may graduate with the fourth-year class, and, again, some in the fourth year may fail of graduation, the figures in Tables VII and VIII ought not to be checked

against those in Table VI. However, the results may be generally compared.

TABLE VII

SHOWING BY DIVISIONS THE NUMBER OF PUPILS WHO ENROLLED IN THE FIRST YEAR
IN 1910 AND OF THIS NUMBER THOSE WHO GRADUATED IN 1914

	Entered in 1910	Graduated in 1914	Percentage
North Atlantic.....	136,470	46,331	34
North Central.....	156,303	70,824	33
South Atlantic.....	30,418	10,226	30
South Central.....	44,092	13,444	42
Western.....	45,052	15,769	35
United States.....	421,325	156,591	37

TABLE VIII

SAME AS TABLE VII, EXCEPT SHOWING THE PERCENTAGE OF GRADUATES BY
DIVISIONS IN 1915

	Entered in 1911	Graduated in 1915	Percentage
North Atlantic.....	145,598	49,008	22
North Central.....	181,171	75,376	41
South Atlantic.....	34,384	11,195	32
South Central.....	51,061	15,106	29
Western.....	49,174	18,340	37
United States.....	461,228	169,014	36

TABLE IX

	First Year		Second Year	Third Year	Fourth Year
Massachusetts.....	{ Boys.....	100	66	49	44
	{ Girls.....	100	70	58	55
Indiana.....	{ Boys.....	100	71	58	51
	{ Girls.....	100	75	62	57
Virginia.....	{ Boys.....	100	55	36	27
	{ Girls.....	100	67	49	42
Tennessee.....	{ Boys.....	100	55	39	21
	{ Girls.....	100	62	45	26
Colorado.....	{ Boys.....	100	63	44	33
	{ Girls.....	100	72	54	44

From each of the five divisions of the United States one state was selected to show the difference in elimination as between boys

and girls. The states selected are representative of the respective divisions, and cover the various factors affecting the elimination of pupils from the public secondary schools of the United States. The results are given in Table IX.

TABLE X

SHOWING ELIMINATION IN CERTAIN CITIES OF THE UNITED STATES
(The same method was used in making the calculations as in Tables I to VI)

	First Year	Second Year	Third Year	Fourth Year
Boston.....	100	73	61	54
Kansas City.....	100	71	54	51
St. Louis.....	100	65	44	37
New York City.....	100	63	41	21
Los Angeles.....	100	45	40	41
Baltimore.....	100	72	52	46
Denver.....	100	86	49	48
Detroit.....	100	69	50	46
Philadelphia.....	100	72	52	39
Milwaukee.....	100	75	43	41
Spokane.....	100	67	46	38
Salt Lake City.....	100	74	55	36